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been built been intr surface. the tower of Caucas Comment: A centrif  3. Production superphose 180,000 - in December if it conduce a conduct a con	rnaces of "	'VKhZ" (Voskresensk	Chemical Factory) type hav	<b>*</b> e
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3. Production superphose 180,000 - in Decembrif it compared about 150,000 to duced about in operate about 130 phosphate pumps, very are brough Colast.	This subst:	itution for a criti	ical material is noteworthy	·,)
superphos 180,000 in Decemb if it con duce a con 150,000 t duced abor in operat about 130 phosphate pumps, ver  4. Raw Mater are broug Colast.	igual pump	of a new type has b	een installed.	
in December 15 it come duce a come duce a come duced about 130 phosphate pumps, ver	i: In 1947,	, the factory produ	med about 90,000 tons of sapacity, it should produce	
in December 1f it come duce a come 150,000 to duced about in operation about 130 phosphate pumps, very 4. Raw Mater are broug Colast.	190,000 to	ns per annum. Howe	ver, the work of the factor	ry
duce a con 150,000 to duced about in operation about 130 phosphate pumps, ver	er 1947 and	d in January and Fe	ebruary 1948 was very good; 1948, the factory will pro-	
duced aborin operation about 130 phosphate pumps, ver	isi.derably l	larger quantity in	1948. possibly 140.000 -	
in operation about 130 phosphate pumps, ver	ms of super rt 3,800 tor	rphosphate. In Feb. ns of sulphuric acid	ruary 1948, the factory prod.d. with five pyrite furnace	0 <del></del>
phosphate pumps, ver are broug Colast.	ion. The Fe	ebruary 1948 produc	tion of superphesphate used	ď
4. Raw Mater are broug Colast.	every 24 he	ours. Some mechanic	eld about 450 tons of super- cal defects occurred in the	<del></del> e
are broug Oblast.	tilators, s	and the pyrite furn	AC06.	
Oblast. 1	als: Sulph	hur pyrites for the	production of sulphuric act (ex-Kalata) in Sverdlovsk	oid
	is raw mater	rial for the produc	tion of superphosphate, the	<sub>e</sub> 50X1-HUN
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CENTRAL IMPELLIGENCE AGENCY

## -2- CONFIDENTIAL

factory uses Khibin apatite concentrate from the flotation plant of the Khibin Apatite Combine at Khäbin, on the Kola Peninsula. This flotation concentrate contains 35 - 40% of P<sub>2</sub>O<sub>5</sub>. Nitric acid ("melanzh" melange) is received from various chemical factories in the USSR. The first consignments came from factories in Central Russia. Caucasian andesite was and still is being received from the Arsha village area on the Georgian Military Road, in the Mount Kazbek area, 50 kms. from the town of Dzaudzhikau (ex-Ordzhonikidze, ex-Vladikavkaz)(43°O2'N, 44°41°E).

- Plans: In the near future, it is intended to produce tricalcium phosphate on a commercial scale at the factory by means of the elimination of fluoride from superphosphate. Tricalcium is used as fodder. Apatite has a considerable content of fluoride which must be eliminated; the method of elimination has been worked out by the Scientific Research Institute for Fertilizers and Insecto-Fungicides (Nauchno-Issledovatelski Institut po Udobreniyam i Insektofungisidam or MULF). Fluoride is eliminated by heating superphosphate to a high temperature in a flow of water steam.
- 6. Personnel: The factory director is V. N. Izvekov, who holds the degree of candidate of technical sciences.

  the total number of personnel at the factory as about 900 men.

50X1-HUM

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